

CLAIMS

1. A network conferencing system in which an output electronic equipment for presenting the contents of presentation, a generating electronic equipment for generating the contents of presentation to be presented by the output electronic equipment, a plurality of attendant electronic equipments operated by users attending a conference, and a conference management server connected with the output electronic equipment and the attendant electronic equipments so as to transmit and receive information to and from the output electronic equipment and the attendant electronic equipments, are connected via a communication network,

each of the attendant electronic equipments comprising an information input/output function for inputting and outputting information from and to the other attendant electronic equipments and the output electronic equipment via the communication network, a presentation function for presenting the contents of presentation by using the output electronic equipment, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic equipments using the output electronic equipment, an authentication function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for managing the state of each electronic equipment connected to the communication network, a display function for displaying, as icons, the other

attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for obtaining information for preparing the proceedings by using the contents of presentation presented by the presentation function,

wherein the display function is to separate an area for icon display of the generating electronic equipment and an area for icon display of the output electronic equipment, thus providing the icon display of the generating electronic equipment and the icon display of the output electronic equipment.

2. The network conferencing system as claimed in claim 1, wherein each of the attendant electronic equipments further has a function to enable selection of the icon displays of the generating electronic equipment and the output electronic equipment and generate a control request for controlling the generating electronic equipment and the output electronic equipment that are selected.

3. The network conferencing system as claimed in claim 1, wherein each of the attendant electronic equipments further has a function to enable selection of the icon display of the generating electronic equipment and transmit an attribute display request for displaying attribute information about data generated and stored by the selected generating electronic equipment, to the conference management server, and

the display function is to display a list of the attribute information generated by the generating electronic equipment corresponding to the selected icon display and

stored in the conference server.

4. The network conferencing system as claimed in claim 1, wherein the display function is to display an available electronic equipment at the conference as a selectable icon display and to display an unavailable electronic equipment at the conference as a non-selectable icon display.

5. The network conferencing system as claimed in claim 1, wherein the display function is to prepare equipment display information including an icon display of an electronic equipment existing within the communication network, in a first screen area, and including an icon display of an electronic equipment existing outside the communication network, in a second screen area.

6. The network conferencing system as claimed in claim 5, wherein the display function is to display location attribute information indicating the presence within the communication network, in the first screen area, and to display location attribute information indicating the presence outside the communication network, in the second screen area.

7. The network conferencing system as claimed in claim 1, wherein the display function is to provide icon displays based on the functions of the output electronic equipment and the generating electronic equipment.

8. An equipment management method for a network conferencing system in which an output electronic equipment for presenting the contents of presentation, a generating electronic equipment for generating the contents of presentation to be

presented by the output electronic equipment, a plurality of attendant electronic equipments, and a conference management server connected with the output electronic equipment and the attendant electronic equipments so as to transmit and receive information to and from the output electronic equipment and the attendant electronic equipments, are connected via a communication network, each of the attendant electronic equipments comprising an information input/output function for inputting and outputting information from and to the other attendant electronic equipments and the output electronic equipment via the communication network, a presentation function for presenting the contents of presentation by using the output electronic equipment, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic equipments using the output electronic equipment, an authentication function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for managing the state of each electronic equipment connected to the communication network, a display function for displaying, as icons, the other attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for obtaining information for preparing the proceedings by using the contents of presentation presented by the presentation function,

wherein when each of the attendant electronic equipments attends a conference,

an area for icon display of the generating electronic equipment and an area for icon display of the output electronic equipment are separated, thus providing the icon display of the generating electronic equipment and the icon display of the output electronic equipment by the display function of the attendant electronic equipment.

9. The equipment management method as claimed in claim 8, wherein the icon displays of the generating electronic equipment and the output electronic equipment are selected by the attendant electronic equipment, and

a control request for controlling the generating electronic equipment and the output electronic equipment that are selected is generated.

10. The equipment management method as claimed in claim 9, wherein the icon display of the generating electronic equipment is selected by the attendant electronic equipment,

an attribute display request for displaying attribute information about data generated by the selected generating electronic equipment is transmitted from the attendant electronic equipment to the conference management server,

the attribute information is transmitted from the conference management server to the attendant electronic equipment, and

a list of the attribute information is displayed by the display function of the attendant electronic equipment.

11. The equipment management method as claimed in claim 8, wherein of icon displays provided by the display function, an icon display of an available electronic

equipment at the conference is made selectable and an icon display of an unavailable electronic equipment at the conference is made non-selectable.

12. The equipment management method as claimed in claim 8, wherein an icon display of an electronic equipment existing within the communication network is included in a first screen area and an icon display of an electronic equipment existing outside the communication network is included in a second screen area.

13. The equipment management method as claimed in claim 8, wherein location attribute information indicating the presence within the communication network is displayed in the first screen area and location attribute information indicating the presence outside the communication network is displayed in the second screen area.

14. The equipment management method as claimed in claim 8, wherein icon displays based on the functions of the output electronic equipment and the generating electronic equipment are provided.

15. A conference management server connected with an output electronic equipment for presenting the contents of presentation, a generating electronic equipment for generating the contents of presentation to be presented by the output electronic equipment, and a plurality of attendant electronic equipments via a communication network, each of the attendant electronic equipments comprising an information input/output function for inputting and outputting information from and to the other attendant electronic equipments and the output electronic equipment via the communication network, a presentation function for presenting the contents of

presentation by using the output electronic equipment, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic equipments using the output electronic equipment, an authentication function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for monitoring the electronic equipment connected with the communication network and managing the state of each electronic equipment, a display function for displaying, as icons, the other attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for obtaining information for preparing the proceedings by using the contents of presentation presented by the presentation function, the conference management server comprising:

equipment management means for monitoring the operating states of the output electronic equipment and the generating electronic equipment and preparing an equipment information file showing the type of each equipment and the operating state of each equipment;

equipment display information preparation means for preparing equipment display information which separately displays an area for icon display of the generating electronic equipment and an area for icon display of the output electronic equipment on the basis of the result of monitoring and the type from the equipment

management means; and

output means for transmitting the equipment display information prepared by the equipment display information preparation means to the attendant electronic equipment.

16. The conference management server as claimed in claim 15, wherein the equipment display information preparation means prepares equipment display information to enable selection of the icon displays of the generating electronic equipment and the output electronic equipment.

17. The conference management server as claimed in claim 15, further comprising data storage means for associating the generating electronic equipment managed by the equipment management means with the data generated by the generating electronic equipment and thus storing the data, and

means for transmitting information for displaying a list of attribute information of the data that is generated by the generating electronic equipment corresponding to the icon display selected by the attendant electronic equipment and is stored in the data storage means.

18. The conference management server as claimed in claim 15, wherein the equipment display information preparation means prepares equipment display information to enable selection of an icon display of an available electronic equipment at the conference and to make it impossible to select an icon display of an unavailable electronic equipment at the conference.

19. The conference management server as claimed in claim 15, wherein the equipment display information preparation means prepares equipment display information including an icon display of an electronic equipment existing within the communication network, in a first screen area, and including an icon display of an electronic equipment existing outside the communication network, in a second screen area.

20. The conference management server as claimed in claim 19, wherein the equipment display information preparation means prepares equipment display information for displaying location attribute information indicating the presence within the communication network, in the first screen area, and displaying location attribution information indicating the presence outside the communication network, in the second screen area.

21. The conference management server as claimed in claim 15, wherein the equipment display information preparation means prepares equipment display information for providing icon displays based on the functions of the output electronic equipment and the generating electronic equipment.

22. An equipment management method for a conference server connected with an output electronic equipment for presenting the contents of presentation, a generating electronic equipment for generating the contents of presentation to be presented by the output electronic equipment, and a plurality of attendant electronic equipments via a communication network, each of the attendant electronic equipments comprising an

information input/output function for inputting and outputting information from and to the other attendant electronic equipments and the output electronic equipment via the communication network, a presentation function for presenting the contents of presentation by using the output electronic equipment, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic equipments using the output electronic equipment, an authentication function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for monitoring the electronic equipment connected with the communication network and managing the state of each electronic equipment, a display function for displaying, as icons, the other attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for obtaining information for preparing the proceedings by using the contents of presentation presented by the presentation function, the method comprising the steps of:

monitoring the operating states of the output electronic equipment and the generating electronic equipment;

preparing an equipment information file showing the type of each equipment and the operating state of each equipment;

preparing equipment display information which separately displays an area for

icon display of the generating electronic equipment and an area for icon display of the output electronic equipment on the basis of the result of monitoring and the type; and transmitting the prepared equipment display information to the attendant electronic equipment.

23. The equipment management method as claimed in claim 22, wherein the equipment display information to enable selection of the icon displays of the generating electronic equipment and the output electronic equipment is prepared.

24. The equipment management method as claimed in claim 22, wherein information related to the generating electronic equipment including the operating state of each generating electronic equipment and the type of each equipment is associated with the data generated by the generating electronic equipment and thus stored, and

information for displaying a list of attribute information of the data that is generated by the generating electronic equipment corresponding to the icon display selected by the attendant electronic equipment and is thus stored, is transmitted.

25. The equipment management method as claimed in claim 22, wherein equipment display information to enable selection of an icon display of an available electronic equipment at the conference and to make it impossible to select an icon display of an unavailable electronic equipment at the conference, is prepared.

26. The equipment management method as claimed in claim 22, wherein equipment display information including an icon display of an electronic equipment existing

within the communication network, in a first screen area, and including an icon display of an electronic equipment existing outside the communication network, in a second screen area, is prepared.

27. The equipment management method as claimed in claim 26, wherein equipment display information for displaying location attribute information indicating the presence within the communication network, in the first screen area, and displaying location attribution information indicating the presence outside the communication network, in the second screen area, is prepared.

28. The equipment management method as claimed in claim 22, wherein equipment display information for providing icon displays based on the functions of the output electronic equipment and the generating electronic equipment is prepared.

29. An attendant electronic equipment connected with an output electronic equipment for presenting the contents of presentation, a generating electronic equipment for generating the contents of presentation to be presented by the output electronic equipment, and a conference management server connected with the output electronic equipment so as to transmit and receive information to and from the output electronic equipment, via a communication network, the attendant electronic equipment being operated by a user attending a conference connected with the server to transmit and receive information to and from the server via the communication network, the attendant electronic equipment comprising

an information input/output function for inputting and outputting information

from and to other attendant electronic equipments and the output electronic equipment via the communication network, a presentation function for presenting the contents of presentation by using the output electronic equipment, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic equipments using the output electronic equipment, an authentication function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for managing the state of each electronic equipment connected with the communication network, a display function for displaying, as icons, the other attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for obtaining information for preparing the proceedings by using the contents of presentation presented by the presentation function,

wherein the display function is to separate an area for icon display of the generating electronic equipment and an area for icon display of the output electronic equipment, thus providing the icon display of generating electronic equipment and the icon display of the output electronic equipment.

30. A network conferencing system in which an output electronic equipment for presenting the contents of presentation, a generating electronic equipment for generating the contents of presentation to be presented by the output electronic

equipment, a plurality of attendant electronic equipments operated by users attending a conference, and a conference management server connected with the output electronic equipment and the attendant electronic equipments so as to transmit and receive information to and from the output electronic equipment and the attendant electronic equipments, are connected via a communication network,

each of the attendant electronic equipments comprising an information input/output function for inputting and outputting information from and to the other attendant electronic equipments, the output electronic equipment and the generating electronic equipment via the communication network, a presentation function for presenting the contents of presentation by using the output electronic equipment, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic equipments using the output electronic equipment, an authentication function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for managing the state of each electronic equipment connected to the communication network, a display function for displaying, as icons, the other attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for carrying out control to prepare the proceedings by using the contents of presentation presented by the presentation function,

wherein the presentation function is to select an icon display of the generating electronic equipment from the icon displays of the generating electronic equipments made by the display function in accordance with the operation by the user, then carry out control to display, by the display function, a list of the contents of material data generated by the generating electronic equipment corresponding to the selected icon display, then select the contents of material data displayed in the list by the display function, and carry out control to transfer the selected material data to the output electronic equipment or the attendant electronic equipment via the conference management server.

31. The network conferencing system as claimed in claim 30, wherein the presentation function is to cause browsing of the selected data by the presentation contents browsing function of the other attendant electronic equipments.

32. The network conferencing system as claimed in claim 30, wherein the presentation function is to control the display function to provide a display related to the contents of the material data when transferring the material data.

33. The network conferencing system as claimed in claim 30, wherein the proceedings control function is to store the material data selected and transferred by the presentation function and the contents of presentation into the conference management server.

34. A data presentation method for a network conferencing system in which an output electronic equipment for presenting the contents of presentation, a generating

electronic equipment for generating the contents of presentation to be presented by the output electronic equipment, a plurality of attendant electronic equipments operated by users attending a conference, and a conference management server connected with the output electronic equipment and the attendant electronic equipments so as to transmit and receive information to and from the output electronic equipment and the attendant electronic equipments, are connected via a communication network, each of the attendant electronic equipments comprising an information input/output function for inputting and outputting information from and to the other attendant electronic equipments, the output electronic equipment and the generating electronic equipment via the communication network, a presentation function for presenting the contents of presentation by using the output electronic equipment and/or the other attendant electronic equipments, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic equipments using the output electronic equipment, an authentication function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for managing the state of each electronic equipment connected to the communication network, a display function for displaying, as icons, the other attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for carrying out control to prepare the proceedings by using the contents of

presentation presented by the presentation function, the method comprising the steps of:

providing an icon display related to the generating electronic equipment by the display function;

selecting the icon display of the generating electronic equipment in accordance with the operation by the user;

displaying, by the display function, a list of the contents of material data generated by the generating electronic equipment corresponding to the selected icon display;

selecting the material data displayed in the list by the display function; and

transferring the selected material data to the output electronic equipment or the attendant electronic equipment via the conference management server.

35. The data presentation method as claimed in claim 34, wherein the selected material data is browsed by the presentation contents browsing function of the other attendant electronic equipments.

36. The data presentation method as claimed in claim 34, wherein the display function is controlled to provide a display related to the contents of data to the selected material data.

37. The presentation method as claimed in claim 34, wherein the material data selected and transferred by the presentation function and the contents of presentation are stored into the conference management server.

38. A conference management server connected with an output electronic equipment for presenting the contents of presentation, a generating electronic equipment for generating the contents of presentation to be presented by the output electronic equipment, and a plurality of attendant electronic equipments via a communication network, each of the attendant electronic equipments comprising an information input/output function for inputting and outputting information from and to the other attendant electronic equipments, the output electronic equipment and the generating electronic equipment via the communication network, a presentation function for presenting the contents of presentation by using the output electronic equipment and/or the other attendant electronic equipments, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic using the output electronic equipment, an authentication function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for monitoring the electronic equipment connected with the communication network and managing the state of each electronic equipment, a display function for displaying, as icons, the other attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for obtaining information for preparing the proceedings by using the contents of presentation presented by the presentation function, the conference management server comprising:

material data input means for inputting material data generated by the generating electronic equipment;

data storage means for storing the material data inputted by the material data input means;

output means for outputting the material data to the output electronic equipment or the attendant electronic equipment in accordance with a request from the attendant electronic equipment having the authority of a presenter terminal with the presentation function; and

control means for carrying out control to cause the presenter terminal to display a list of the material data generated by the generating electronic equipment in accordance with a material presentation request for presenting the material data generated by the generating electronic equipment from the presenter terminal, and to transfer the material data selected in accordance with a material presentation request for selecting the material data displayed in the list, to the output electronic equipment or the attendant electronic equipment.

39. A data presentation method for a conference management server connected with an output electronic equipment for presenting the contents of presentation, a generating electronic equipment for generating the contents of presentation to be presented by the output electronic equipment, and a plurality of attendant electronic equipments via a communication network, each of the attendant electronic equipments comprising an information input/output function for inputting and outputting

information from and to the other attendant electronic equipments, the output electronic equipment and the generating electronic equipment via the communication network, a presentation function for presenting the contents of presentation by using the output electronic equipment and/or the other attendant electronic equipments, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic using the output electronic equipment, an authentication function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for monitoring the electronic equipment connected with the communication network and managing the state of each electronic equipment, a display function for displaying, as icons, the other attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for obtaining information for preparing the proceedings by using the contents of presentation presented by the presentation function, the method comprising the steps of:

inputting material data generated by the generating electronic equipment;

storing the inputted presentation data and material data;

causing the presenter terminal to display a list of the material data generated by the generating electronic equipment in accordance with a material presentation request for presenting the material data generated by the generating electronic equipment from

the attendant electronic equipment having the authority of a presenter terminal with the presentation function; and

transferring the material data selected in accordance with a material presentation request for selecting the material data displayed in the list, to the output electronic equipment or the attendant electronic equipment.

40. An attendant electronic equipment connected with an output electronic equipment for presenting the contents of presentation, a generating electronic equipment for generating the contents of presentation to be presented by the output electronic equipment, and a conference management server connected with the output electronic equipment so as to transmit and receive information to and from the output electronic equipment, via a communication network, the attendant electronic equipment being operated by a user attending a conference connected with the server to transmit and receive information to and from the server via the communication network, the attendant electronic equipment comprising

an information input/output function for inputting and outputting information from and to the other attendant electronic equipments, the output electronic equipment and the generating electronic equipment via the communication network, a presentation function for presenting the contents of presentation by using the output electronic equipment, a presentation contents browsing function for browsing the contents of presentation presented by the presentation function of the other attendant electronic equipments using the output electronic equipment, an authentication

function for carrying out authentication of attendance of the other attendant electronic equipments at a conference, an equipment management function for managing the state of each electronic equipment connected to the communication network, a display function for displaying, as icons, the other attendant electronic equipments with their attendance authenticated by the authentication function and the electronic equipment managed by the equipment management function, and a proceedings control function for carrying out control to prepare the proceedings by using the contents of presentation presented by the presentation function,

wherein the presentation function is to select an icon display of the generating electronic equipment from the icon displays of the generating electronic equipments made by the display function in accordance with the operation by the user, then carry out control to display, by the display function, a list of the contents of material data generated by the generating electronic equipment corresponding to the selected icon display, then select the contents of material data displayed in the list by the display function, and carry out control to transfer the selected material data to the output electronic equipment or the attendant electronic equipment via the conference management server.